

## CLAIMS

What is claimed is:

1        1.        A method of automatically creating a plurality of individually customized  
2 documents, each for a corresponding one of a plurality of individuals, said method  
3 comprising the steps of:  
4                creating a plurality of document components;  
5                creating a plurality of rules governing document assembly;  
6                providing document specific data and text, said provided data and text being  
7 further specific to individuals intended to receive customized copies of documents  
8 being published; and  
9                providing a document request, said document request initiating assembly of a  
10 document, said document being assembled responsive to said created rules and  
11 provided data and text.

1        2.        A method as in claim 1 wherein the rules comprise:  
2                document rules directing component selection and text selection;  
3                condition rules directing selection of logic conditions to be evaluated; and  
4                action rules directing document editing actions to be taken responsive to  
5 logical evaluation of selected document rules and condition rules.

1        3.        A method as in claim 2 wherein a plurality of said document rules are  
2 assembled into a logic function that is spread across multiple ones of said plurality of  
3 condition rules.

1        4.        A method as in claim 3 wherein said plurality of document rules include  
2 operators from condition rules directing collection of said multiple rules to form said  
3 logic functions.

- 1 5. A method as in claim 4 wherein ones of said document rules select other  
2 subsequent document rules, condition rules and variable text rules.
- 1 6. A method as in claim 5 wherein ones of said document rules conditionally  
2 select said subsequent document rules, condition rules and variable text rules.
- 1 7. A method as in claim 6 wherein said document rules further contain multiple  
2 business layers, each of said business layers providing a client specific organization,  
3 content and business rules.
- 1 8. A method as in claim 7 wherein unused said business layers are marked null.
- 1 9. A method as in claim 7 wherein said business layers provide document  
2 component authorization security control, document reporting control and control for  
3 searching and indexing rules blocks.
- 1 10. A method as in claim 9 wherein document component authorization security  
2 control designates user read and write access to document components.
- 1 11. A method as in claim 1 wherein a plurality of said document rules are always  
2 true, always true rules being unconditional rules.
- 1 12. A method as in claim 1 wherein each of said condition rules is linked to a  
2 document rule.
- 1 13. A method as in claim 12 wherein each of said condition rules contain  
2 pointers indicating any next condition and any subcondition.
- 1 14. A method as in claim 13 wherein blocks of said condition rules are selected  
2 for a corresponding document rule, said blocks providing a logic function to be  
3 evaluated for said corresponding document rule.

1 15. A method as in claim 1 wherein each of said action rules corresponds to one  
2 of said document rules.

1 16. A method as in claim 15 wherein each of said action rules contains a specific  
2 action on a component with respect to said document being created.

1 17. A method as in claim 15 wherein the plurality of said action rules are  
2 grouped into groups, each group of action rules being identified for one of said  
3 document rules.

1 18. A method as in claim 16 wherein document components are inserted, deleted  
2 or replaced as directed by a particular action rule.

1 19. A data structure for automatically assembling a plurality of individually  
2 customized documents, each assembled document for a corresponding one of a  
3 plurality of individuals, said data structure comprising:  
4 a plurality of selectable document components;  
5 document rules directing document component selection and text selection;  
6 condition rules each linked to one of said document rules and directing  
7 selection of logic conditions to be evaluated;  
8 action rules each linked to one of said document rules and directing  
9 document editing actions to be taken responsive to logical evaluation of selected  
10 document rules and condition rules; and  
11 collected data and text, document specific and specific to individuals  
12 intended to receive customized copies of documents being published, whereby in  
13 response to a document request initiating assembly of a document, said document is  
14 assembled responsive to said created rules and collected data and text.

- 1 20. A data structure as in claim 19 wherein selecting a block of said document  
2 rules selects a logic function that is spread across multiple ones of said plurality of  
3 condition rules.
- 1 21. A data structure as in claim 20 wherein ones of said document rules are  
2 linked to select other subsequent document rules, condition rules and variable text  
3 rules.
- 1 22. A data structure as in claim 21 wherein ones of said document rules are  
2 linked to conditionally select said subsequent document rules, condition rules and  
3 variable text rules.
- 1 23. A data structure as in claim 22 wherein said document rules further contain  
2 multiple business layers, each of said business layers providing client specific  
3 organization, content and business rules, unused said business layers being marked  
4 null.
- 1 24. A data structure as in claim 23 wherein said business layers contain  
2 document component authorization security control, document reporting control and  
3 control for searching and indexing rules blocks.
- 1 25. A data structure as in claim 24 wherein document component authorization  
2 security control authorizes read and write access for selected document components.
- 1 26. A data structure as in claim 22 wherein a plurality of said document rules are  
2 always true, always true rules being unconditional rules.
- 1 27. A data structure as in claim 19 wherein ones of said condition rules point to a  
2 next condition and a subcondition.

1 28. A data structure as in claim 27 wherein each of said action rules contains a  
2 specific action on a component with respect to a document being created.

1 29. A data structure as in claim 28 wherein said action rules selectively cause  
2 linked document components to be inserted, deleted or replaced in a document being  
3 created.

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